

TABLE 56.60-2(a)—ADOPTED SPECIFICATIONS NOT LISTED IN THE ASME BOILER AND PRESSURE VESSEL CODE \*—Continued

ASTM specifications	Source of allowable stress	Notes
<b>Nonferrous Materials</b>		
<b>Bar stock:</b>		
B 16 (soft and half hard tempers) .....	See footnote 5 .....	(5,7).
B 21 (alloys A, B, and C) .....	See footnote 8 .....	(8).
B 124:		
Alloy 377 .....	See footnotes 5 and 9 .....	(5,9).
Alloy 464 .....	See footnote 8 .....	(8,10).
Alloy 655 .....	See footnote 11 .....	(11).
Alloy 642 .....	See footnote 12 .....	(7,12).
Alloy 630 .....	See footnote 13 .....	(7,13).
Alloy 485 .....	See footnote 8 .....	(8,10).
<b>Forgings:</b>		
B 283 (forging brass) .....	See footnotes 5 and 9 .....	(5,9).
<b>Castings:</b>		
B 26 .....	See footnotes 5, 14, and 15 .....	(5,14,15).
B 85 .....	See footnotes 5, 14, and 15 .....	(5,14,15).

\* **Note:** Table 56.60-2(a) is a listing of adopted bar stock and nonferrous forging and casting specifications not listed in the ASME Boiler and Pressure Vessel Code. Particular attention should be given to the supplementary testing requirements and service limitations contained in the footnotes. All ASTM standards referred to in Table 56.60-2(a) and its footnotes are incorporated by reference (see 46 CFR 56.01-2).

<sup>1</sup> For limitations in use refer to 46 CFR 56.60-5.

<sup>2</sup> Allowable stresses shall be the same as those listed in UCS23 of section VIII of the ASME Boiler and Pressure Vessel Code (incorporated by reference; see 46 CFR 56.01-2) for SA-675 material of equivalent tensile strength.

<sup>3</sup> Physical testing shall be performed as for material manufactured to ASME SA-675 (incorporated by reference, see 46 CFR 56.01-2), except that the bend test shall not be required.

<sup>4</sup> Allowable stresses shall be the same as those listed in UCS23 of section VIII of the ASME Boiler and Pressure Vessel Code for the corresponding SA-182 material.

<sup>5</sup> Limited to air and hydraulic service with a maximum design temperature of 150 °F. The material must not be used for salt water service or other fluids that may cause dezincification or stress corrosion cracking.

<sup>6</sup> [Reserved]

<sup>7</sup> An ammonia vapor test, in accordance with ASTM B 858M-95 shall be performed on a representative model of each finished product design.

<sup>8</sup> Allowable stresses shall be the same as those listed in UNF23 of section VIII of the ASME Boiler and Pressure Vessel Code for SB-171, naval brass.

<sup>9</sup> An ammonia vapor test, in accordance with ASTM B 858M, shall be performed on a representative model for each finished product design. Tension tests shall be performed to determine tensile strength, yield strength, and elongation. Minimum values shall be those listed in Table 3 of ASTM B 283.

<sup>10</sup> Physical testing, including mercurous nitrate test, shall be performed as for material manufactured to ASTM B 21.

<sup>11</sup> Physical testing shall be performed as for material manufactured to ASTM B 96. Allowable stresses shall be the same as those listed in UNF23 of section VIII of the ASME Boiler and Pressure Vessel Code for SB-96 and shall be limited to a maximum allowable temperature of 212 °F.

<sup>12</sup> Physical testing shall be performed as for material manufactured to ASTM B 171, alloy D. Allowable stresses shall be the same as those listed in UNF23 of section VIII of the ASME Boiler and Pressure Vessel Code for SB-171, aluminum bronze D.

<sup>13</sup> Physical testing shall be performed as for material manufactured to ASTM B 171, alloy E. Allowable stresses shall be the same as those listed in UNF23 of section VIII of the ASME Boiler and Pressure Vessel Code for SB-171, aluminum bronze, alloy E.

<sup>14</sup> Tension tests shall be performed to determine tensile strength, yield strength, and elongation. Minimum values shall be those listed in table X-2 of ASTM B 85.

<sup>15</sup> Those alloys with a maximum copper content of 0.6 percent or less shall be acceptable under this specification. Cast aluminum shall not be welded or brazed.

[CGFR 68-82, 33 FR 18843, Dec. 18, 1968, as amended by CGFR 69-127, 35 FR 9978, June 17, 1970; CGD 72-104R, 37 FR 14233, July 18, 1972; CGD 73-248, 39 FR 30839, Aug. 26, 1974; CGD 73-254, 40 FR 40165, Sept. 2, 1975; CGD 77-140, 54 FR 40612, Oct. 2, 1989; CGD 95-012, 60 FR 48050, Sept. 18, 1995; CGD 95-027, 61 FR 26001, May 23, 1996; CGD 95-028, 62 FR 51201, Sept. 30, 1997; USCG-1998-4442, 63 FR 52190, Sept. 30, 1998; USCG-1999-5151, 64 FR 67180, Dec. 1, 1999; USCG-2003-16630, 73 FR 65182, Oct. 31, 2008]

### § 56.60-3 Ferrous materials.

(a) Ferrous pipe used for salt water service must be protected against corrosion by hotdip galvanizing or by the use of extra heavy schedule material.

(b) (Reproduces 124.2.C) Carbon or alloy steel having carbon content of more than 0.35 percent shall not be used in welded construction, nor be shaped by oxygen-cutting process or other thermal-cutting process.

[CGD 73-254, 40 FR 40165, Sept. 2, 1975, as amended by USCG-2003-16630, 73 FR 65183, Oct. 31, 2008]

### § 56.60-5 Steel (High temperature applications).

(a) (Reproduces 124.2.A.) Upon prolonged exposure to temperatures above 775 °F (412 °C), the carbide phase of plain carbon steel, plain nickel-alloy